

In this response, Applicants respectfully traverse the §102(e) and §103(a) rejections. Applicants respectfully request reconsideration of the present application in view of the following remarks.

Applicants initially note that the Examiner at the top of page 3 of the Office Action apparently relies on the Holcomb '637 reference which Applicants addressed in their previous response. In view of the fact that the Holcomb '637 reference is not recited in either the §102(e) or the §103(a) rejection, it is believed that this reliance on the Holcomb '637 reference is an error on the part of the Examiner, and renders the Office Action unclear and improper. The Examiner has failed to provide a clear disposition of claims 16 and 17, and thus any subsequent Office Action should have a non-final status.

With regard to the §102(e) rejection over Fidric, MPEP §2131 specifies that a given claim is anticipated "only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference," citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 indicates that the cited reference must show the "identical invention . . . in as complete detail as is contained in the . . . claim," citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Applicants respectfully submit that the Fidric reference fails to meet each and every limitation of independent claims 1 or 12.

Independent claim 1 is directed to an optical fiber laser comprising a laser cavity, a multi-mode pump source, and a combiner. The laser cavity is defined by first and second reflective devices, and comprises a cladding pumped optical fiber lasing medium coupled between the first and second reflective devices. The combiner has at least first, second and third ports, with an output of the multi-mode pump source being operatively coupled to the first port of the combiner, and the combiner being coupled at its second and third ports within the laser cavity. The combiner further comprises a tapered fiber bundle and is configured to couple pump light from the multi-mode pump source into the laser cavity utilizing mode-based coupling without the use of wavelength-based coupling.

The Examiner in rejecting claim 1 as anticipated by Fidric relies generally on the abstract and FIGS. 1-16 of Fidric. However, Fidric fails to disclose the claimed optical fiber laser comprising

a laser cavity defined by first and second reflective devices, as well as the claimed coupling of second and third ports of the combiner within the laser cavity. Fidric is instead directed to an optical coupler. For example, coupler 40 in FIG. 6 is used “for coupling multimode laser sources 44 together with the single mode fiber 20,” as indicated in column 5, lines 53-55. Fidric further indicates in column 6, lines 7-10, that coupler 40 may be “fusion-spliced to a double clad fiber 10 which may function as fiber amplifier or a fiber laser (via formed fiber Bragg gratings) as is well known in the art.” It is important to note that the fiber laser comprising double clad fiber 10 of Fidric does not itself meet the limitations of claim 1, in that the coupler 40 is not “coupled at its second and third ports within the laser cavity” of the fiber laser comprising double clad fiber 10 as would be required by the express language of the claim.

Applicants also note that the Examiner in formulating the §102(e) rejection fails to draw any direct correspondence between particular elements of Fidric and particular elements of the claim, which renders the rejection vague and difficult to analyze. Nonetheless, it is believed that Fidric fails to disclose an optical fiber laser in which a combiner is coupled at its second and third ports within the laser cavity, as set forth in claim 1.

Accordingly, Applicants respectfully submit that Fidric fails to anticipate the present invention as set forth in claim 1.

Independent claim 12 includes limitations similar to those of claim 1, and is believed allowable for at least the reasons identified above with regard to claim 1.

The dependent claims are believed allowable for at least the reasons identified above with regard to their respective independent claims. The Alphonse reference fails to supplement the fundamental deficiencies of Fidric as applied to the independent claims.

Moreover, the Examiner provides only a conclusory statement of motivation to combine Fidric and Alphonse. The Federal Circuit has stated that when patentability turns on the question of obviousness, the obviousness determination “must be based on objective evidence of record” and that “this precedent has been reinforced in myriad decisions, and cannot be dispensed with.” In re Sang-Su Lee, 277 F.3d 1338, 1343 (Fed. Cir. 2002). Moreover, the Federal Circuit has stated that “conclusory statements” by an examiner fail to adequately address the factual question of motivation, which is material to patentability and cannot be resolved “on subjective belief and unknown

authority." *Id.* at 1343-1344. There has been no showing in the present §103(a) rejection of objective evidence of record that would motivate one skilled in the art to combine Fidric and Alphonse or to modify their teachings to meet the limitations in question. Instead, the Examiner at page 4, section 5, of the Office Action simply states as follows:

For the benefit of having grating fiber and bidirectional pumping, it is within one skill [sic] in the art to provide Fidric et al. '302 the teaching of Alphonse '088.

The above-quoted statement of obviousness given by the Examiner in the Office Action is precisely the type of subjective, conclusory statement that the Federal Circuit has indicated provides insufficient support for an obviousness rejection.

In view of the above, Applicants believe that claims 1, 3, 5-8, 11, 12, 14, 16 and 17 are in condition for allowance, and respectfully request the withdrawal of the §102(e) and §103(a) rejections.

Respectfully submitted,



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